

IN THE CLAIMS:

1. (Amended) A semiconductor device having a two-dimensional barcode pattern for information management provided [at] on a surface of each of semiconductor chips arrayed on a semiconductor wafer surface as chip ID information.

4. (Amended) A semiconductor device manufactured using a lead frame, with the lead frame having a two-dimensional barcode pattern for information management provided on [a] said lead frame to which semiconductor chips are bonded as frame ID information.

7. (Amended) A semiconductor device having at least one semiconductor chip sealed by resin, and having a two-dimensional barcode pattern for information management provided at an outer surface of said resin[-sealed semiconductor chip] as product ID information.

Claim 9, line 3, replace "is made to correspond" with --corresponds--.

Claim 10, line 3, replace "is made to correspond" with --corresponds--.

11. (Amended) An information management system for semiconductor devices, having at least one semiconductor chip that implements management of information related to said semiconductor devices separately for individual semiconductor devices comprising:

chip ID information provided on said semiconductor chip as a two-dimensional barcode pattern for information management for each chip;

a read device that reads said chip ID information; and

a management unit that registers said chip ID information thus read and manages individual semiconductor manufacturing processes based upon said chip ID information thus registered.

Claim 12, line 3, replace "is made to correspond" with --corresponds--.

14. (Amended) An information management system for semiconductor device manufactured using a lead frame, which system [that] implements management of information related to said semiconductor devices separately for individual semiconductor devices comprising:

frame ID information provided, ~~as a~~ two-dimensional barcode pattern for information management, on a lead frame to which semiconductor chips are bonded;

a read device that reads said frame ID information; and

a management unit that registers said frame ID information thus read and manages individual semiconductor manufacturing processes based upon said frame ID information thus registered.

Claim 15, line 3, replace "is made to correspond" with --corresponds--.

16. (Amended) An information management system for semiconductor devices having semiconductor chips sealed by resin, which system [that] implements management of information related to said semiconductor devices separately for individual semiconductor devices comprising:

product ID information provided as a two-dimensional barcode pattern for information management at an outer surface of said resin[-sealed semiconductor chips];

a read device that reads said product ID information; and